

10. (Twice Amended) A method for determining binding of a ligand to a receptor, comprising contacting a collective ligand variant population with a population of five or more receptors and detecting binding of a receptor from said population of five or more receptors to a ligand from said collective ligand variant population.

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11. (Twice Amended) The method of claim 10, further comprising dividing said collective ligand variant population into two or more subpopulations, contacting one or more of said two or more subpopulation with said population of five or more receptors and detecting one or more ligand variant subpopulations having binding activity to said population of five or more receptors.

13. (Twice Amended) The method of claim 12, wherein said detecting identifies a ligand variant having binding activity to a receptor in said population of five or more receptors.

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14. (Twice Amended) The method of claim 13, wherein said detecting identifies a ligand variant having optimal binding activity to a receptor in said population of five or more receptors.

17. (Twice Amended) The method of claim 10, further comprising isolating an individual ligand variant having binding activity to a receptor in said population of five or more receptors, wherein said ligand variant is linked to tag.

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18. (Twice Amended) The method of claim 10, further comprising dividing said collective ligand variant population into two or more subpopulations, contacting said two or more subpopulations with said population of five or more receptors and detecting one or more ligand variant subpopulations having binding activity to said population of five or more receptors.

Please add the following new claims.

--40. (New) The method of claim 10, wherein said collective ligand variant population is selected from the group consisting of polypeptide, nucleic acid, carbohydrate, lipid, and organic-derived compound ligands.

41. (New) A method for determining binding of a ligand to a receptor, comprising contacting a collective ligand variant population with a population of two or more receptors and detecting binding of a receptor from said population of two or more receptors to a ligand from said collective ligand variant population, wherein said collective ligand variant population is selected from the group consisting of polypeptide, nucleic acid, carbohydrate, and lipid ligands.

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